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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,994	03/26/2004	Memphis Zhihong Yin	10010594-2	8996

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EXAMINER	
NGUYEN, CHANH DUY	

ART UNIT	PAPER NUMBER
2675	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/810,994	YIN, MEMPHIS ZHIHONG	
	Examiner	Art Unit	
	Chanh Nguyen	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *03/26/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The references listed on the Information Disclosure Statement filed on March 26, 2004 been entered and considered by examiner; see attached PTO-1449.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 14 and 17-19 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers (U.S. Patent No. 6,329,634) in view of Prosenko (GB 2,139,762).

As to claim 14, Bowers discloses a system including a portable computer (10) including a keyboard (14), a display (24), a housing (12, 22), computer mechanical connector (54a) and a peripheral device (30) including a housing (32) , movement sensor (70, 76) and a peripheral device mechanical connector (54) configured to mate with the computer mechanical connector (54a). The only thing Bowers does not mention is a touch pad adjacent to the keyboard. Prosenko teaches touch pad (63) adjacent to the keyboard (13) (see Figures 1 and 3). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used touch pad as taught by Prosenko to the device of Bowers so as to allow the operator to keep

his or her eyes on the display screen without having to look for a separate execution button (see lines 13-30 of Prosenko).

As to claim 17, Bowers clearly teaches the peripheral device (30) including a wireless transmitter and the portable computer including a wireless receiver (see column 6, line 61 through column 7,line 4).

As to claim 18, Bowers clearly teaches a second housing portion (e.g., lid 22) pivotable relative to the first housing portion (base 12) between an open position and closed position.

As to claim 19, Bowers clearly teaches the peripheral device (30) is a mouse.

4. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers in view of Prosenko as applied to claim 26 above, and further in view of Lin (U.S. Patent No. 6,094,341).

As to claim 15, note the discussion of Bowers and Prosenko above, both does not mention a handle portion. Lin teaches a handle portion (13) located on the cover of the laptop computer or portable computer (1) (see Figure 1). Bowers teaches an open region located on the keyboard portion (12) of the laptop computer or portable computer (10). Thus, combining the handle portion (13) of Lin and the open region (58) of Bowers would meet the claimed "an open region is defined between the handle portion and another portion of the portable computer housing" as broad claimed language Bowers clearly teaches the peripheral device mechanical connector (54) facing away from the opening region (58). Therefore, it would have been obvious to one of ordinary skill in

the art at the invention was made to have used the handle portion of Lin to the portable computer of Bower as modified by Prosenko so that the portable can be carried easily by a user.

As to claim 16, Lin teaches the computer housing handle portion defines a portion of an overall device handle (i.e. handle 13 and front side of the cover 12 and front face of the keyboard housing) and combining handle portion (13) of Lin hand peripheral device (30) would meet the claimed "the peripheral device housing defines a remainder of the overall device handle".

5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harding et al (U.S. Patent No. 6,184,869) in view of Toyoda et al (U.S. Patent No. 5,371,516).

As to claim 1, Harding discloses a peripheral device (10) for use on a surface including a housing (12) defining longitudinal ends and a longitudinal axis, a first movement sensors (30, 32) associated with the housing (12) and adapted to sense movement of the housing (12) relative to the surface (see column 4,lines 32-52). Harding teaches a movable member (50) associated with the housing (12) and movable relative to the housing (12), a second movement sensor (52, 54) associated with the housing (12) and the movable member (50) relative to the other of the housing and adapted to sense movement of one of the housing and the movable member (50) relative to the other of the housing and the movable member (50) (see column 4,line 56 through column 5, line 6). The only thing Harding does not mention is the movable

member associated with one of the longitudinal ends such that the movable member will engage the surface in response to placement of the peripheral device on the surface with the longitudinal axis perpendicular to the surface. Toyoda teaches a movable member (8) engaging the surface (4) in response to placement of the peripheral device (1) on the surface with the longitudinal axis perpendicular to the surface (4);see Figures 1 and 2. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the pen type shape computer input device of Toyoda to the computer mouse of Harding so that it is can be easily handled (see column 1, lines 60-62).

As to claim 2, Harding teaches that "encoders (30, 32, 52 and 54) may be comprised of comprised of electromagnetic or optical device" (see column 5,lines 55-58.

As to claim 3, Harding clearly teaches the movable member including a ball (50) and the second sensor including sensor arrangement that monitors rotation of the ball (see column 4, lines 55-65).

As to claim 4, Harding clearly teaches the housing having at least one button (18a-18c) associated with the exterior of the housing.

As to claim 5, Harding teaches that "the input device 10 with its own resident power source and to transmit data signal from the input device to the computer using wireless transmission technology, such as infrared and transmission"

As to claim 6, Harding teaches the housing defining a bottom surface, the first movement sensors (30, 32) is associate with bottom surface as recited in the claim.

6. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers in view of Segalle (U.S. Patent No. 6,532,002 B1) and Toyoda et al (U.S. Patent No. 5,371,516).

As to claim 7, Bowers discloses a peripheral device (30) for use with a portable computer (10) including a computer mechanical connector (54a) including a housing (32) defining longitudinal ends and a longitudinal axis, movement sensor (70, 76) and a peripheral device mechanical connector (54) configured to mate with the computer mechanical connector (54a). Bowers does not mention is a plurality of ridges configured to augment a user's grip on the housing. Segalle teaches a plurality of ridges (23) configured to augment a user's grip on the housing(10); see column 5, lines 34-37. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used plurality of ridges as taught by Segalle to the mouse housing of Bowers so as to provide an orthopedic computer mouse (see column 2, lines 44-55 of Segalle). The only thing Bower and Segalle do not mention is the movable member associated with one of the longitudinal ends such that the movable member will engage the surface in response to placement of the peripheral device on the surface with the longitudinal axis perpendicular to the surface. Toyoda teaches a movable member (8) engaging the surface (4) in response to placement of the peripheral device (1) on the surface with the longitudinal axis perpendicular to the surface (4);see Figures 1 and 2. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the pen type shape

computer input device of Toyoda to the computer mouse of Bowers as modified by Segalle so that it is can be easily handled (see column 1, lines 60-62).

As to claim 9, since the peripheral device (30) Bowers performs as a mouse, it is clear that the movement sensors (70, 76) adapted to sense movement of the housing relative to the surface.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers in view of Segalle and Toyoda, as applied to claim 7, and further in view of Klein et al (U.S. Patent No. 6,163,326).

As to claim 8, note the discussion Bower above, Bower discloses the a system as recited in claim 8 with exception of describing the an aperture in the mouse device. Klein (Figure 7) teaches a latch aperture (60) in the peripheral device adapted to receive t e computer latch (36). The claimed latch aperture also can reads on depression (63) position in the side wall (42) of the mouse(450) shown in Figure 5. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used a latch aperture of Klein to the peripheral device of Bowers as modified by Segalle and Toyoda so as to avoid the detachable devices separate from the base if they are jostled or bumped, requiring the user to take time to reattach the input device (see column 1, line 63 through column 2,line 11 of Klein).

8. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers in view of Segalle and Toyoda et al as applied to claim 7 above, and further in view of Harding.

As to claims 10-11, note the discussion of Bowers, Segalle and Toyoda. Harding teaches a movable member (50) associated with the housing (12) and movable relative to the housing (12), a second movement sensor (52, 54) associated with the housing (12) and the movable member (50) relative to the other of the housing and adapted to sense movement of one of the housing and the movable member (50) relative to the other of the housing and the movable member (50) (see column 4,line 56 through column 5, line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used a movement sensor and a second movement sensor as taught by Harding to the input device of Bowers as modified by Segalle and Toyoda so as to provide an input device having multi-dimension, having more than two dimensions simultaneously (see column 2,lines 39-51 of Harding).

As to claim 12, Harding teaches that "the input device 10 with its own resident power source and to transmit data signal from the input device to the computer using wireless transmission technology, such as infrared and transmission". This reads on the limitation a wireless movement data transmitter as recited in the claim.

As to claim 13, Harding teaches that "encoder (30, 32, 52 and 54) may be comprised of electromagnetic or optical device (see column 5, lines 55-58).

Inquiries

.Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras can be reached on (703) 305-9720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chanh Nguyen
Primary Examiner
Art Unit 2675

C. Nguyen
November 28, 2004